Monthly Review

Federal Reserve Bank of Boston

NEW ENGLAND INDUSTRIES — SHOE MANUFACTURING: (1) Tip punching, (2) Stitching Room, (3) Stitching (tip line), (4) Toe lasting, (5) Leveling, (6) Finishing.

THE OUTLOOK *for* The New England Shoe Industry*

THE NEW ENGLAND shoe industry was jolted in 1947 by a sharp drop in production. The share of national output of its three leading shoe-producing states dipped to 31 per cent, the lowest annual figure in more than 100 years.

Since 1924 New England's shoe production, as represented by the output of Massachusetts, New Hampshire, and Maine manufacturers, had fluctuated between 33 and 36 per cent of the national total. In 1946 it had been 35 per cent, the highest since 1939.

New England's loss of four per cent of the nation's shoe production in a single year was unparalleled except during two years following World War I. Moreover, the region's shoe producers showed no improvement in their relative position during the first half of 1948. (See chart in the Business Review Section, page 12.)

Had something occurred which had weakened the position of the New England shoe industry? Was the decline in relative importance only temporary or was it permanent? Would the decline continue in the absence of new developments? How serious would it be for the New England regional economy? What remedial measures could be taken? How can important shoe-producing cities or towns meet their special problems when they experience declining activity in shoe production and employment? The study upon which this article is based was designed to assist in answering these questions.

Shoes and the New England Economy

The leather and leather-goods industry is New England's fourth largest industrial employer. In some New England cities, shoe production provides as much as 70 per cent of total manufacturing employment. Moreover, the related industries which manufacture leather and produce shoe cut stock and findings create additional employment for one-fourth as many persons as work in the shoe factories themselves. In January 1948, average New England boot and shoe employment amounted to about 85,000 persons; an additional 21,000 were employed in the affiliated industries.

New England's production of more than 145,000,000 pairs of shoes and slippers in 1947 had a factory value of almost $550,000,000 and provided payrolls of approximately $175,000,000. About $50,000,000 more in payrolls came from the leather, cut stock, and shoe findings industries.

The shoe industry has provided New England as a whole with an important source of purchasing power to finance its imports of commodities and services from other regions of the United States and from abroad. In 1947 net exports of shoes from New England amounted to approximately $400,000,000. About $250,000,000 were required to finance the net imports of hides and leather, leaving roughly $150,000,000 available to meet New England's general needs.

The stake of New England's financial institutions in the shoe industry is indicated by the magnitude of bank lending to shoe manufacturers. On November 20, 1946, as revealed by the Commercial Loan Survey conducted by the Federal Reserve Bank of Boston, New England member banks alone had outstanding 679 loans to shoe manufacturers aggregating $23,700,000. At that loan level, with the average interest rate of 2.8 per cent, annual interest earned by banks would have been $660,000.

*This is the first of two articles discussing the outlook for the New England shoe industry. The second will appear in the *Monthly Review* for December 1948.

The study upon which this article is based was made with the cooperation of the New England Shoe and Leather Association, Boston, Massachusetts.

Historical Parallels?

Historical analogy suggests that the situation following World War II has been and may continue to be similar to the shoe industry's experience following World War I.

A long but gradual decline in New England's share of total United States shoe production occurred after a peak of more than three-fourths of total output was reached following the Civil War. The growth of competing manufacturers in other states was stimulated by growing regional markets, mechanization of the assembly processes, the increasing importance of style, the increasing availability of factory-type labor, and their geographical advantages in hide and leather supplies. By 1919, the New England total had dropped to 48 per cent of national output, although its actual output had increased greatly. Government orders during World War I stimulated industrial expansion throughout the country and encouraged shoe producers in other regions to exploit their advantages.

Between 1919 and 1924 the share of New England's three important shoe-producing states declined to 34 per cent, and the region showed an absolute decline in the number of pairs of shoes produced. The readjustment was completed by 1924, and after that year New England's total shoe production fluctuated closely with national output. From 1924 to 1946, however, there was a gradual shift within New England, as the relative importance of Massachusetts declined somewhat and that of New Hampshire and Maine increased.

The drop from 1946 to 1947 after the termination of hostilities was similar to the pattern after 1919. Similar market forces were at work as the nation's population and purchasing power centers moved farther westward. World War II and its aftermath had similar expansionary influences on shoe manufacturers located in the Middle West and other more distant regions. Superficially, at least, the situations are parallel. But this possible explanation of recent events cannot be accepted without a careful scrutiny of the changes which have actually taken place in the shoe industry within the past few years.

What Has Happened?

From 1935 through 1942 New England shoe production (including Connecticut's very small output) held its position practically constant at 35 per cent of national output. In 1943, however, production in the New England Federal Reserve District declined proportionately more than production in the rest of the country, primarily because of a relatively greater influence of manpower shortages and opportunities for workers to earn higher wages in war industries. As a result, New England's share of national output fell off by about two per cent and remained close to 33 per cent in 1943, 1944, and 1945.

In 1946 there was a tremendous accumulated demand for types of shoes that had not been available during the war, and shoe production spurted. National output reached an all-time peak of 529,000,000 pairs of shoes. New England recovered its wartime losses and turned out 185,000,000 pairs of shoes, 35 per cent of United States output. The easing of the tight labor market was important in the area's improved position in 1946.

In September 1946, New England's proportion of total output was 36 per cent. Its share contracted to 35 per cent in October and to 33 per cent in November. National production slumped after October, but New England production declined more rapidly than that of the rest of the country. A low point of 28.7 per cent of United States output was reached in June 1947. For the entire year 1947 New England shoe production of 145,000,000 pairs was only 31 per cent of the national output of 468,000,000 pairs. The regional production was 21.9 per cent lower than the 1946 volume as compared with a national shrinkage of only 11.5 per cent.

What has happened to shoe production in other regions? Chart 1 shows how the proportions of national shoe output have changed since 1925 in the leading shoe-producing states outside New England, in comparison with this region.

The most striking change was the growth of shoe production in the "All Other States" category from 6.6 per cent in 1925 to 14.5 per cent during the first seven months of 1948. Connecticut, the only New England state in the group, showed a declining share of output from 0.4 to 0.2 per cent during the interval.

Accompanying the growth of the "All Other States" was a definite though irregular drop in New York's share of total production from 1925 to 1948. This drop is all the more significant in view of the fact that New York had been the principal beneficiary from Massachusetts' losses between 1910 and 1924.

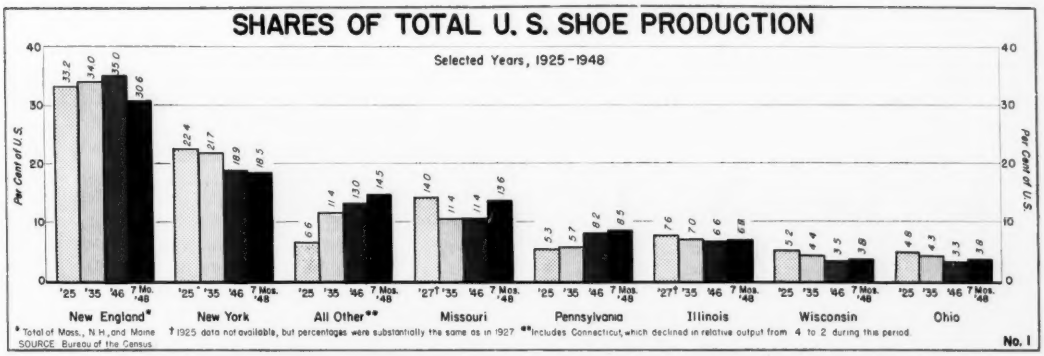
Except for Pennsylvania, which advanced from 5.3 to 8.5 per cent of the national total between 1925 and 1948, there were no other marked alterations in the 1925 pattern. Pennsylvania's gain pushed it above its 7.6 per cent pre-World War I peak of 1914, from which it had fallen by 1925.

There has been some tendency toward regional production specialization by type and class of shoes, though most important shoe-manufacturing states are large producers even in the lines in which they do not specialize. New England has traditionally been strongest in the men's and women's categories and has been relatively weaker in the youths' and boys', misses' and children's, and infants' and babies' classifications. Substantial changes have occurred, however, in New England's pattern of production, even during the period of more or less constant total share of national output from 1925 to 1944. During that interval New England's three leading shoe-producing states showed a decline in men's shoe production from 40 to 34 per cent of national output. Women's shoe output dropped from 38 to 35 per cent, and misses' and children's output fell from 24 to 13 per cent. There were increases in youths' and boys' shoes from 21 to 24.5 per cent, and in "all other" shoes from 26 to 34 per cent.

Since 1946 the regional share of total output has declined in every class except infants' and babies' shoes (Chart 2)[1]. Women's shoe production has shown a slight

[1] A statistical supplement has been prepared for this article. It contains a complete breakdown of 1946, 1947, and first half 1948 total production figures for the New England region by class and type of shoe, as well as production data by class for the individual New England states during the same period. The supplement is available on request to the Research and Statistics Department of the Federal Reserve Bank of Boston.

These figures are based on a revised census classification not comparable with data before 1945.


SHARES OF TOTAL U. S. SHOE PRODUCTION
Selected Years, 1925-1948
Per Cent of U.S.
'25 '35 '46 7 Mos. '48
New England*
33.2 34.0 35.0 30.6
New York
22.4 21.7 18.9 18.5
All Other**
6.6 11.4 13.0 14.5
Missouri
'27† '35 '46 7 Mos. '48
14.0 11.4 11.4 13.6
Pennsylvania
5.3 5.7 8.2 8.5
Illinois
7.6 7.0 6.6 6.8
Wisconsin
5.2 4.4 3.5 3.8
Ohio
4.6 4.3 3.3 3.8
* Total of Mass., N.H., and Maine
† 1925 data not available, but percentages were substantially the same as in 1927
** Includes Connecticut, which declined in relative output from 4 to 2 during this period.
SOURCE: Bureau of the Census
No. 1

relative recovery in 1948, and the position of the other classes seems to have become temporarily stabilized at about the mid-1947 level.

The greater sensitivity of New England shoe production to seasonal influences in the women's and misses' lines is revealed by the seasonal fluctuations in the share of this region's output in those lines since the beginning of 1947. The prewar seasonal patterns in shoe production had been altered during the war; they re-emerged late in 1946.

New England's Competitive Position

The basic statistics of the changing geographical distribution of shoe production have been given. It is now necessary to try to explain the changes which have taken place and, if possible, to predict future trends and suggest possible actions which New England manufacturers can take to retain or improve their relative position. These problems can best be approached by considering certain advantages and disadvantages of the New England shoe industry relative to competing areas.

1. Location of Markets

New England's population on July 1, 1948, was 6.4 per cent of total United States population. Shoe manufacturers in this region have had to find markets for more than 80 per cent of their production outside New England (allowing for shoes produced in other states and sold here). The nearby Middle Atlantic states, which contain 20.4 per cent of the nation's population and in 1947 received 24.4 per cent of its total income payments, are themselves heavy producers of shoes and can absorb only a fraction of New England's shoe "exports." Markets have to be found much farther afield.

Market shifts were important in the geographical readjustments of shoe production from 1870 to 1924. Recent changes in population and income distribution suggest that it may become more difficult for New England to continue to "export" 80 per cent of the regional shoe output to the increasingly more distant markets. The population center of the country, which has been moving westward since the establishment of the colonies, took another jump away from New England and the Middle Atlantic states between 1940 and 1948. Equally important, the income payment center of the country took an even greater leap westward.

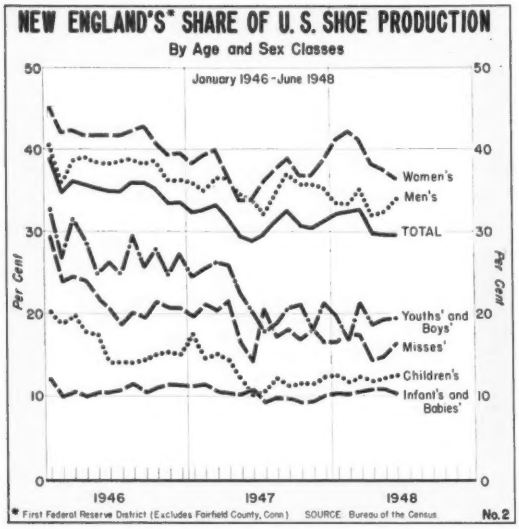
More distant markets are harder to service in an industry where style is of great importance, where the typical manufacturer is small, and where the average producer sells a large proportion of his output direct to retail establishments. Even though freight costs on shoes are not large, the time lost in shipment and the difficulty of maintaining adequate contacts with local distributors can produce some competitive disadvantage for manufacturers located farthest from their markets. That this is by no means a fatal disadvantage is indicated by the success of New England shoe producers in maintaining their relative position from 1925 through 1946. Nevertheless, in combination with other factors, such as the establishment of new factories in shoe "importing" states far removed from New England, the progressively less favorable location of shoe manufacturers in the area may affect adversely the relative future position of its shoe industry.

2. Ease of Entry of New Firms and the Optimum Size of Shoe Manufacturing Companies

The shoe business is easy to enter and hard to stay in. In July 1948 there were more than 1,100 companies manufacturing shoes in the United States. The five largest firms supply about 30 per cent of the national demand for leather footwear. The other 1,095 companies fight over the rest of the market. The mortality rate in the industry has been increasing steadily since 1900. For the years 1926 to 1935 it averaged 16.8 per cent. It has been even higher since the end of World War II.

During recent years the largest companies in the industry have been improving their relative positions. For example, four of the largest shoe producers showed an average increase of 10.6 per cent in output from 1946 to 1947, while the rest of the industry combined (including the other large firms) showed a decline of 16.1 per cent in output. The drop was far greater for most of the small producers.

The large concerns have several distinct advantages over most of the small shoe manufacturers. They are much better situated in relation to retail outlets for their product, which is of special importance in this industry. Most of the leading producers have their own chains of retail stores scattered throughout the country or are well entrenched in their relations with established independent retailers, department stores, chain stores, and mail order houses. When small producers go out of business, their better retail accounts are often captured by the larger companies, further increasing the concentration of the industry.



Better balance in product lines and geographical decentralization provide the largest producers with further advantages over their lesser competitors. Moreover, the diversification of the large producers can be obtained without appreciable loss of efficiency by multi-plant production and specialization in each factory upon one or a few product lines.

The optimum size of a shoe *factory* is not particularly large, as opposed to the optimum size of the shoe manufacturing *company*. The average plant of the largest company in the industry has only about 500 employees. For high-quality or high-style shoes the optimum plant size is even smaller. The advantages of large company size are most important in the purchasing and marketing operations.

Despite the competitive advantages of the major companies, there has been a continual influx of hopeful new shoe producers. Some are successful; more are not.

In addition to the considerations discussed above, there are other conditions which encourage the rapid entry and departure of small shoe producers. One very important factor is the low financial requirements for setting up in the shoe business. Almost all necessary machinery and equipment can be obtained under leasing arrangements with the machinery manufacturers. Royalties are paid on the basis of machine use. Plant requirements are also not exacting, and adequate space can often be rented. The financial needs of the prospective manufacturer are often limited to the raising of working capital. Inadequate capitalization has contributed to the high mortality of shoe producers.

Another factor encouraging the entry of new producers is the custom in some communities of offering special inducements to new industrial establishments. Tax concessions, free rent in community-owned factory buildings, and similar financial aids to the new enterprise make it even easier to start producing with a shoestring.

Despite the extensive market for shoes, the combination of ease of entry and seasonality of consumption has resulted in an annual capacity in the industry greater than would have been required if orders had been more evenly distributed during the year. With the large companies retaining or improving their positions, particularly in the staple lines in which they are most active, the newcomers find their easiest initial outlet and their keenest competition in the highest style lines. The greatest overcapacity and the highest mortality rates are in the style lines.

The average New England shoe manufacturer is smaller than the typical shoe producer in the United States as a whole. Even though the New Hampshire and Maine companies are above average in size, the much lower Massachusetts average dominates the regional figures. Only one of the "big five" producers has its headquarters in the New England region, and it is the smallest of the group, though another of the largest companies does operate five of its shoe factories in New England. The shoe industry in this area is overbalanced with small producers.

This situation was probably a factor in New England's lower share of shoe production after 1946. It could easily contribute to future shifts in the same direction for both New England and the Middle Atlantic states, whose shoe companies are also smaller than the national average.

There is often a direct relationship between the size of a company and the managerial skills of its executives. On the other hand, many of New England's small shoe factories are run by individuals who have rich backgrounds in shoe production and merchandising, who are keen in discerning trends, and who are sensitive to the convolutions of the market. The net effect of these influences is largely buried in the effects of the many other factors which affect the position of the industry. Nevertheless, it appears that the keenness and aggressiveness of New England's shoe producers has offset any managerial disadvantages attributable to less than average size and has provided an appreciable though intangible support to the region's relative position in the industry.

3. Machinery and Technology

The leasing system is an equalizing force in the use of machinery by shoe manufacturers. Since most machines are leased rather than purchased, the problem of replacing old equipment with new models is not as great as if the old equipment were owned outright. A shoe manufacturer, wherever located, has essentially the same opportunities for procuring the type of machinery he desires at the established royalty rates. Similarly, machinery servicing is uniformly available. The location of large machinery manufacturers within a given area provides shoe firms in that area with an insignificant advantage over their more distant competitors.

There is, of course, a great deal of difference among individual shoe producers as to the type and amount of equipment used, but there seems to be no systematic regional difference. Machinery employed depends primarily on the type of shoe made, the price class of the product, and the preferences of management.

The development and use of new processes and techniques is also not an important source of continuing regional competitive advantage or disadvantage. If a new process is brought out by a shoe-machinery manu-

facturer, it is uniformly available. If a new process or technique is developed by a shoe manufacturer, it may provide him with a short-run competitive advantage, but it eventually spreads out and is used wherever it is appropriate and economical.

Similar conclusions apply to factory layout, materials handling, and other production techniques. The achievement of operating efficiency depends on managerial and engineering skill, rather than on the geographical location of the plant.

4. Wage Rates and the Availability and Productivity of Labor

Labor costs in shoe production average more than 25 per cent of total manufacturing costs and are second in importance only to material costs. Regional differences in the availability, skills, and wage rates of shoe workers are, therefore, of great importance in the highly competitive shoe industry. In the past, migration of firms within areas and between areas has been motivated to a great extent by the desire of manufacturers to utilize less expensive labor and gain a competitive advantage.

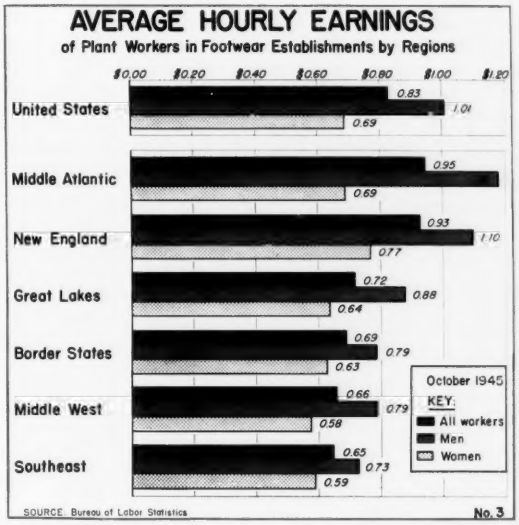
The availability and skill of New England shoe workers have been important to the continued location of producers in this area. Nevertheless, there are few "shoe towns" such as Brockton left in New England. The greatest concentration of production is found in industrial centers such as Lynn, Boston, Haverhill, Worcester, and Manchester, New Hampshire. In prewar years the principal alternative sources of employment for shoe workers were textile mills, garment shops, and the durable goods industries. It does not appear that these industries endangered the supply of shoe workers because, except for the electrical-goods industry, the other types of employment offered little advantage over shoe production with respect to stability of employment or wage rates.

Demobilization of military forces and curtailed production of war goods permitted the shoe industry to expand its labor force in 1946 and turn out a record volume of production. Labor requirements since 1946 have been slightly lower, and except for occasional brief periods the shoe industry has not had difficulty in securing sufficient workers. The continuation of boom conditions in the economy and the resumption of some military production may produce labor stringencies in certain areas, particularly in the skilled categories.

Shoe workers are paid on a piece-rate basis with incentive plans in effect in most plants. There are wide variations in earnings for the same occupation within regions and between regions. In the fall of 1945 the United States Bureau of Labor Statistics studied wage rates for shoe workers in the major producing areas.[2] The regional comparison in Chart 3 shows that the overall average hourly earnings of all plant workers in New England exceeded the national average by 12 per cent but were lower than earnings in the Middle Atlantic states. For both men and women workers, earnings in New England exceed the average for the country.

A comparison of earnings for individual job classifications shows that New England was above the national average in almost every instance. Moreover, according to a 1947 survey of the Bureau of Labor Statistics, shoe workers in the Boston area receive higher rates than comparable workers in all cities other than Los Angeles and New York. Massachusetts workers generally earn more per hour than comparable workers in New Hampshire and Maine.

The highest average hourly earnings are generally found in large urban areas, in small plants, in factories producing men's and women's shoes, and where union organization is strong. In New England, shoe production is concentrated in or adjacent to large industrial localities. The average New England factory has less than 250 employees. Workers in the shoe industry were among the first in this area to organize. Finally, a major portion of the regional output is in men's and women's shoes. The conditions for high wage rates are all present in New England.

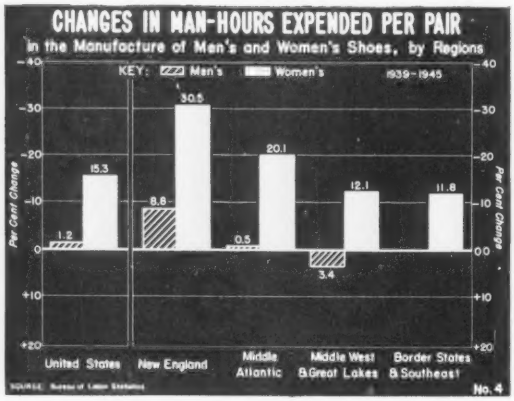


With the payment of higher than average wage rates, New England's shoe producers must secure greater than average man-hour output to hold down their labor costs. Productivity depends on the skill, quality of workmanship, and cooperation of labor, as well as on the coordinating and planning skills of management. Unfortunately, absolute productivity figures are not yet available for the shoe industry on a regional basis. The high reputation of New England shoe workers and the shrewdness of its plant managers suggest that this region may enjoy an advantage in labor productivity.

A more concrete indication of New England's favorable productivity situation in recent years is contained in a Bureau of Labor Statistics study of trends in labor requirements per unit of output.[3] For the country as a whole there was an 8.8 per cent reduction in labor time per pair of shoes between 1939 and 1945. New England shoe factories increased their output per man-hour more than producers located in any other shoe-producing area in all the major lines. (See Chart 4 for data on men's and women's shoes.)

[2] U. S. Department of Labor, Bureau of Labor Statistics, *Wage Structure: Footwear, 1945*, Series 2, No. 23. 1946.

[3] U. S. Department of Labor, Bureau of Labor Statistics, *Trends in Man-Hours Expended Per Unit: Selected Footwear, 1939 to 1945*, March 1948.



In conclusion, it appears that New England shoe manufacturers utilize labor efficiently enough to compensate for the high average wage rates paid in the region. In addition, the generally cooperative attitude of the unions and the pride of workmanship of the production workers are distinct assets to shoe manufacturers in this region.

5. Material and Other Non-Labor Costs

The average composition of total costs is given as follows for the two most important shoe categories:[4]

Item	*Women's Shoes (July 1, '41)*	*Men's Shoes (July 28, '43)*
Leather costs	39.9%	43.5%
Cloth linings and doublers	2.6	1.4
Findings, laces, etc.	4.7	4.7
Cartons and cases	2.0	1.4
Lasts, dies and patterns	2.3	.4
Total material and supplies	51.5%	51.4%
Labor costs	29.5	24.2
Royalties	2.1	1.8
Other factory expense	6.6	6.0
Selling and administrative costs (excl. advertising)	10.3	16.6
	100.0%	100.0%

The present composition of costs is the same in most respects as it was in the years given here. Materials and supplies constitute more than half the cost of manufacturing shoes, and any regional differences in prices for the necessary items would obviously have an important bearing on competitive positions.

Owing to the existence of numerous shoe-supply houses and tanneries throughout the shoe-producing regions and to the very low percentage of freight costs to material prices (averaging about one per cent for leather), there is not an important difference between prices paid by New England shoe manufacturers and producers in the rest of the country. However, New England tans only a small portion of its upper leather and "imports" all its sole leather. Domestic hides and skins brought here for tanning from the Mid-West are assessed higher freight charges than the same items going to Missouri.

New England is well located with respect to foreign hides and skins, but the area has not pressed this advantage. Certain other materials and supplies such as cut stock and findings are more readily available in New England and are exported to other shoe-producing states. The advantages in foreign supplies, cut stock, and findings compensate for the slight disadvantages in leather and domestic hides and skins.

With regard to other non-labor costs, such as fuel, power, depreciation, interest, insurance, and taxes, greater differences may exist among firms in the same region than between regions. It is known that for certain of these cost items, such as power and fuel, prices or rates are higher in some New England areas than in many other parts of the country. The unfavorable differences, where they exist, seem to be greatest for the smallest items of cost.

6. Class and Price-Range of Shoes

New England's past position in the American shoe industry has been based largely upon its importance as a producer of men's and women's dress shoes and of women's sandals and playshoes. It has also produced substantial quantities of slippers, athletic shoes, and footwear for juveniles.

An analysis of the composition of New England shoe production reveals the fallacy of attempting to explain the decline in relative position after 1946 in terms of the types of shoes produced. If New England shoe production in 1946 had been distributed among the various types of shoes according to the national pattern, the percentage changes actually experienced within each group would have produced a total 1947 output only one per cent larger than the actual 1947 output. New England's percentage declines were greater than those of the rest of the country in every category except babies' dress shoes, of which this region had previously been only a small producer.

Of the aggregate 40,800,000 drop from 1946 to 1947 in pairs of shoes produced in New England, 21,500,000 can be accounted for by its share of the national break in shoe consumption. Only 1,500,000 can be explained by the composition of New England shoe production. Consequently, there remains a 17,800,000 pair loss which must be accounted for by other market forces.

New England's share of total national production has not changed appreciably in most categories since 1947 (Chart 2). Women's shoes are an exception; its position in that category was slightly stronger during the first half of 1948 than during the first half of 1947. Previously, the relative loss of position in women's shoe production had been borne by all New England states, although Massachusetts had been hardest hit. In the production of men's shoes Massachusetts was even more severely affected; the rest of the region recorded slight gains.

Greater specialization in the present strong lines would not help the New England shoe industry increase its share of United States output. Less specialization on women's novelty shoes and men's and women's dress shoes would probably help a little. If New England's distribution of output had been the same as that of the

[4] U. S. Department of Agriculture, *Marketing and Manufacturing Margins for Hides and Skins, Leather and Leather Products*, Technical Bulletin No. 961 July 1948.

nation in 1946, its 1947 share of national production would have been closer to 31.5 per cent than to the actual figure of 31.1 per cent.

The outstanding opportunity for changed emphasis in shoe types in New England is to be found in greater production of shoes for children. The unusually large crops of babies during the past few years will provide larger total markets for youths', boys', misses', and children's shoes in future years. New England manufacturers did improve their position from 9.7 per cent of the national total in 1946 to 11.1 per cent in 1947 in the babies' dress-shoe line, primarily by the entry of new firms. New producers of babies' shoes continue to be established. The babies' dress-shoe line was the only line in which New England improved its position from 1946 to 1947. It will have similar future opportunities in the other juvenile dress-shoe lines, in all of which it is relatively weak at present.

Another opportunity exists in the need of millions of farm women, as reported by agricultural extension clothing specialists, for comfortable, durable, trim-looking work shoes. That need is not at present being met satisfactorily by the shoe industry. A similar opportunity exists in types of work shoes for women in industry.

One of the reasons given for the recent resurgence of Missouri as a shoe-producing state was its expansion into infants' lines, special work shoes, and sporting shoes, as well as the standard men's, women's, and children's shoes. The New England industry can benefit from Missouri's example.

It appears that, allowing for New England's heavy production of women's sandals and playshoes, and its light production of children's types and slippers, factory shoe prices of this region are currently about in line with or slightly below the national average. The average factory selling price of New England's shoes in 1947 was $3.67 as compared with $3.76 for the country as a whole. In Massachusetts it was $3.88, in New Hampshire $3.44, and in Maine $3.39. At most, this area possesses a very slight price advantage during periods of below normal business activity and a very slight price disadvantage during periods of above normal business activity.

7. Shoe Style and Quality

New England producers of high-priced men's shoes, particularly in the Brockton area, have in the past been style leaders. During the last few years, however, other regions have cut into that leadership somewhat, and Massachusetts men's shoe output has suffered. Whether the change in position will be temporary or permanent cannot as yet be determined. If permanent, it may well affect the position of men's shoe producers in the region.

Style is of even greater importance in women's dress shoes. In this line New England produced 44 per cent of national output in 1946; 38 per cent in 1947. Women's sandals and playshoes are also high-style items; in 1946 New England produced 50 per cent of national output of that type; in 1947, 45 per cent. In these lines the flexibility and sensitiveness to style changes of the small New England manufacturers have in the past been distinct advantages, even though the local producers have not been the leaders in setting the styles. In itself, the record of New England's high proportion of shoe production in these lines is a good indication of the past style acceptability of its products. There is no basis for expecting a sudden change in the situation.

Another aspect of the style situation is the use of materials. New England shoe factories had substituted non-leather materials during the war along with the rest of the industry. When restrictions were removed, New England and other manufacturers switched back to leather. This region's output of shoes with part-leather and non-leather uppers dropped from 20 per cent of total production in March 1946 to seven per cent in March 1947. Comparable United States figures are 20 per cent and nine per cent. New England and United States figures are also in close agreement for the more recent months. Materials composition, therefore, has not been a factor in New England's postwar loss of relative position.

Coupled with style is the matter of quality of product in relation to price. Quantitative measurements of quality differentials are necessary, and they are scarce. According to recent investigations by a consumers' testing bureau of more than 50 lines of nationally distributed men's shoes, half of the top ten lines in quality are made in New England. The highest quality shoes produced elsewhere in the country were also found to be considerably higher priced. Since this sampling was made for a different purpose from ours, it cannot be accepted as proof of higher *average* quality of New England-made men's shoes. Nevertheless, it does suggest that New England output compares favorably with men's shoes produced in the rest of the country, if indeed New England does not have a quality advantage. So far as can be determined, the same applies to women's and the other categories of shoes.

8. Marketing Methods

In the shoe industry, marketing policies often have greater influence upon a firm's competitive position than its production policies. To determine the possible effects of different distribution techniques on postwar production patterns, the Research Department of the Federal Reserve Bank of Boston, with the cooperation of the New England Shoe and Leather Association, undertook a study of marketing practices of shoe factories in this region. While comparisons cannot be made with practices in other regions, information about the relative success of alternative techniques in this area should be of value to members of the industry in appraising their policies.

Usable reports were received from 100 companies of all sizes producing all types of shoes in all shoe-producing regions of New England. The aggregate 1947 production of these firms represented 43 per cent of total annual production in the New England Federal Reserve District. Information on classes of shoes produced, number of employees, price lines, areas of sale, use of brand names, methods of shipment, marketing channels, and advertising practices was obtained.

The larger shoe manufacturers in New England were able to maintain output from 1946 to 1947 better than small firms, as was true of producers in the country as a whole. The aggregate production of the 14 sampled firms with 500 or more employees in 1947 declined only three per cent from the second quarter of 1946 to the

second quarter of 1947. The output of the other 86 companies dropped approximately 40 per cent during the same interval. Among predominantly men's shoe producers, the larger firms showed increased aggregate output of seven per cent compared with a drop of 24 per cent for the other firms. Among the predominantly women's shoe producers, even the larger firms suffered a combined loss in output of 27 per cent, compared with a loss of 41 per cent by the smaller companies. In the women's field size was no guarantee against production losses during that critical period, though it seems to have helped to reduce the drop.

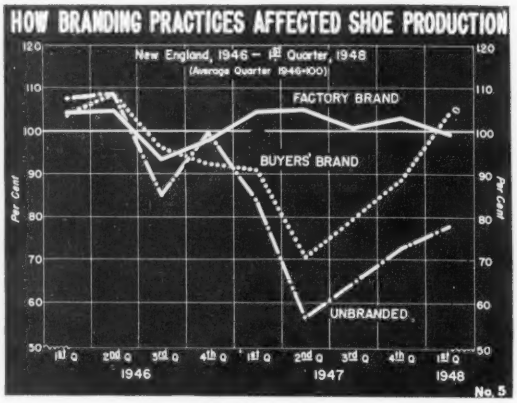
With respect to price lines, *firms producing mostly men's medium-priced shoes have shown the greatest stability of any New England group since January 1946.* Aggregate production of companies producing mainly men's high-priced shoes showed strength until the middle of 1947, but after that time production in this category fell off. Production in all price lines of women's shoes was weak during 1947 and has showed continued instability. Production of high-priced misses' and children's shoes, although minor compared to total production, has increased steadily since January 1946.

Reports of sales by marketing area show that only six of the surveyed firms sold their product exclusively in New England, and they were all small companies. Most companies indicated a wide distribution of their sales. Of the aggregate production of surveyed firms, 17 per cent was sold in New England, 28 per cent in the Middle Atlantic states, 32 per cent in the Middle West and Great Lakes states, and the remaining 23 per cent in the rest of the country. *There is no discernible relationship between stability of output and areas of sale.*

Forty-three per cent of total 1947 shipments of reporting firms had factory brands, 51 per cent had buyers' brands, and six per cent were unbranded. Factory brands were used predominantly by men's shoe producers, and by the largest firms especially, while buyers' brands were employed mostly by producers of women's shoes. The relative stability of these brand groups is summarized in Chart 5. *In general, the use of factory brands was accompanied by the greatest stability in output, while shoes bearing buyers' brands or no brands were subject to much greater fluctuations in volume.*

There is a close relationship between a company's branding practices and its policy of producing for stock or to customer's order ("make-ups"). Generally speaking, factory brands are used by those companies producing for stock, while firms producing "make-ups" tend to concentrate on buyers' brands and unbranded merchandise. *In every class, production for stock showed greater stability than production to customers' orders throughout the period for which we have information.* Chart 6 shows the quarterly index of production by class of product for each type of shipment. Although total output of sample companies producing mainly for stock was considerably less than total output of sample firms producing "make-ups," the experience of the former group strongly suggests that there are advantages in its use for every class of producer.

Few of the surveyed companies use any one distribution channel exclusively. The reporting companies indicated that 27 per cent of aggregate shoes sold in 1947 went to chain stores, 26 per cent direct to independent retailers, 21 per cent to retail stores owned by or under common ownership with the factory, 17 per cent to wholesalers or jobbers, and nine per cent to other buyers.



The accompanying table shows the relative importance of the various channels in the three major classes of shoes and indicates the success of manufacturers in maintaining sales through each type of outlet.

The aggregate production of predominantly men's shoe producers selling principally to chain stores has increased more since 1946 than the production of any other sales-channel group in the men's category. *The results of the survey indicate that more selling through chain stores would be desirable for men's shoe manufacturers. Sales through affiliated retail stores were also maintained well.*

For women's shoes, affiliated retail stores provided the most successful outlets. Misses' and children's shoe producers achieved most marked success in maintaining their sales to independent retailers.

There was a marked indifference to advertising in printed media among the surveyed manufacturers. Sixty-four firms indicated that they did no advertising in newspapers or periodicals. A greater proportion of women's shoe producers than men's left consumer promotion to some other agency. Most of the firms which did advertise concentrated on national periodicals. *With the exception of producers of misses' and children's shoes, in which the companies which advertised regionally and nationally were exceptionally successful in maintaining and increasing their production, firms advertising their products either locally or nationally seemed to enjoy no marked advantage over firms not advertising at all.*

It should be remembered that all findings reported above are based on averages for companies within the various groups. The findings, therefore, must be used with caution, since individual companies may be very successful even though they follow practices that have been unsuccessful in the aggregate.

New England's Future Share

From this detailed analysis of the factors which affect shoe manufacturers' competitive positions, we can now come to some conclusion about how large New England's share of the shoe market is likely to be in

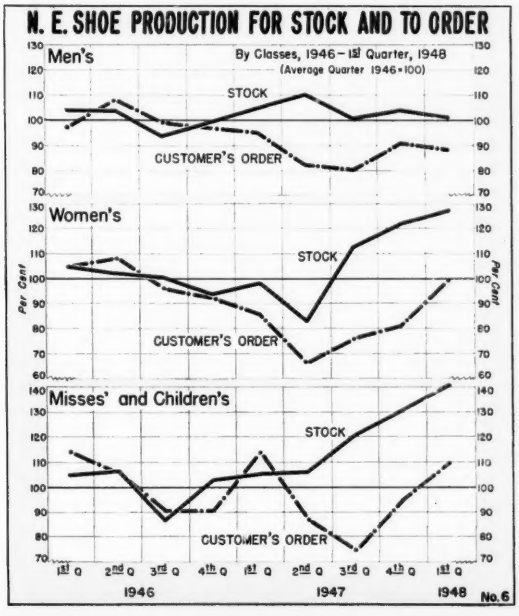
SUCCESS IN USE OF SALES CHANNELS, BY CLASS OF SHOE: 1947

Sales Channel	Men's Shoes		Women's Shoes		Misses' and Children's Shoes	
	Sales Through Channel, 1947	Change, 1946 to 1947	Sales Through Channel, 1947	Change, 1946 to 1947	Sales Through Channel, 1947	Change, 1946 to 1947
Affiliated retail stores	44%	+ 9%	5%	+38%	—	—
Independent retailers	36	− 2	14	−15	59	+25%
Wholesalers and jobbers	10	−23	28	−29	31	−13
Mail order houses	4	−20	4	−41	—	—
Chain stores	3	+34	49	−16	10	+ 1
All others	3	+ 4	—	—	—	—

the future. There are few factors in which the region has either a decided advantage or a decided disadvantage in comparison with producers located elsewhere in the United States. The most apparent and probably most important of the local disadvantages have been discussed above under markets, ease of entry, and optimum size of company. The national market has been moving farther away from New England, and it is relatively easy for new producers to enter the industry elsewhere to exploit their advantages of proximity to markets. The small size of most New England shoe producers is also a competitive disadvantage, as the industry trend is toward greater concentration of output in the large companies.

To date it has been the intangible factors such as shoe quality, managerial "know-how," pride of workmanship, labor-management relations, and sheer tradition that have allowed New England producers to maintain their share of national output. The regional supply of skilled shoe-factory labor has been another advantage.

Changes in markets and conditions within the industry backed up during the war years and resulted in the geographical realignments which have been observed.



Those readjustments took place more rapidly after World War II than similar adjustments after World War I, however, and seem to have been completed in 1947. It is probable that for the next few years New England's share of national output will remain close to the 1947 and first half of 1948 figures of 31 per cent. The New England industry may improve its position, however, by revising some of its practices.

Over the long term a further gradual relative decline is possible. The New England region does not have enough fundamental advantages in shoe production to continue producing such a large excess of output over its own consumption requirements. The growth of production in states and regions which have heretofore not been large shoe producers will probably be accompanied by decreases in the relative position of most, if not all, established producing areas. Despite the probable long-run changes, it is to be expected that New England shoe manufacturers will continue indefinitely to furnish a much larger share of total United States production than the region consumes.

There are some remedial actions which New England shoe manufacturers can take, particularly those in Massachusetts. Greater product diversification would provide a broader and more stable production base. The opportunities are most apparent in the juvenile shoe lines and in such special types as work shoes for women. Manufacturers should become better informed about population trends by age and sex groupings.

Massachusetts producers would also benefit from some increase in size. In certain areas, adoption of common brands and a single selling agency by producers making the same general shoe types might be of mutual advantage in increasing consumer acceptance. The relative value of various alternative marketing practices has been pointed out above.

The second article in this series, which will appear in the December *Monthly Review*, will consider trends in national production and consumption of shoes and what the lower percentage of United States output means to the New England regional economy and its leading shoe-producing areas.

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Rates Firming on Business Loans

CHANGES in yields on Government securities have spread throughout the money market, raising average rates on commercial loans in the nation from 2.53 per cent in June to 2.65 per cent in September. These changes were indicated in the second quarterly survey of commercial loan rates by the Federal Reserve System. The average rate in New England rose from 2.31 per cent in June to 2.38 per cent in September.

Yields on the various maturities of Government securities strongly influence money market rates. Fluctuations in these rates are reflected in changes in interest rates in other sections of the money market, including the market for commercial loans.

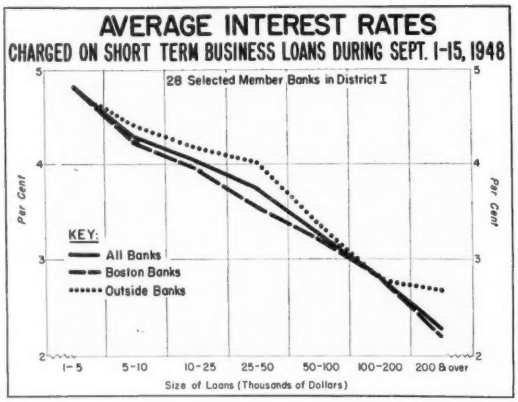
In an effort to exercise effective control over the volume of credit, the monetary authorities have attempted to make loan funds less readily available. The Treasury's debt retirement program, unpegging the rates on short-term Government securities, and raising reserve requirements have increased the cost of reserve funds and exerted continued pressure on the commercial banks' reserve positions. Short-term Government securities have been made more attractive as a medium for investment of reserve funds.

Beginning in mid-1947 the Treasury and the Federal Reserve System acting in cooperation allowed yields on short-term Government securities to rise. As a result, rates on Treasury bills rose from ⅜ per cent in mid-1947 to 1.14 per cent in the fall of this year, and during the same period the yield on 12-month Treasury certificates increased from ⅞ per cent to 1¼ per cent. Medium-term Government bond yields adjusted upward to the higher short-term rates, while the yields on long-term Government securities rose to support levels where they have been held firm. Rediscount rates at the Federal Reserve banks were raised in January 1948 from one per cent to 1¼ and in August to 1½ per cent.

Required reserves held by member banks were also raised to higher levels during the latter part of September. In New England, as elsewhere, reserves against net demand deposits were increased two percentage points and against time deposits 1½ percentage points.

Commercial Loan Rates Revised Upward

The change in the structure of interest rates — the relationship of short- to intermediate- to long-term rates — caused sympathetic changes in the lending rates on business loans at commercial banks. Information collected by the Federal Reserve System concerning rates paid by borrowers for new short-term business loans made by commercial banks during the period June 1–15 and September 1–15, 1948, show a general firming of rates between the two dates. Some firming is also shown between these two periods and November 1946 — the date of the Federal Reserve System's Survey of Commercial and Industrial Loans.



Commercial loans, in the size groups (in thousands of dollars), \$1–5, \$5–10, \$10–25, \$25–50, \$50–100, and \$100–200, show a firming of rates in all size groups in New England as well as in the nation between June and September 1948. In New England, loans of \$200 thousand and over in size showed virtually no change in rates, but in the nation the greatest increase — ¼ of one per cent — occurred in the \$100–200 thousand range.

At the five largest Boston banks the increases in rates on loans ranged from ⅛ to ⅓ of one per cent. Rates on loans in the \$1–5 thousand and \$50–100 thousand groups showed the greatest increases. Average rates (weighted) on all loans at these banks rose from 2.31 to 2.38 per cent between June and September, a considerably smaller increase than that from 2.53 to 2.65 per cent shown for the nation. Some differences existed between rates at the largest banks in the city of Boston and those in the various banking areas outside — ranging up to slightly more than one per cent.

Generally, the differences in rates between the nation and New England and the area differences within the First District reflect the relative position of the banks in terms of the supply and demand for funds and banker-customer relationships. The proportionate volume of loans made at various interest rates within any one loan size category is also a factor causing differences in the average rate for any particular loan size and therefore the weighted average for all loans.

Medium and small loans showed the greatest proportionate increase in New England between June and September, whereas in the nation the proportion of smaller loans declined somewhat. The largest proportions of loans made were in the large- and medium-size groups. In Boston about 40 per cent of total loans made in the first half of September were \$200 thousand and over. In the nation, 67 per cent of the loans made were in this size group.

Further upward revisions of rates on commercial loans are probable if the demand for funds continues strong and no change in policy is made by the monetary authorities. The cumulative effect of their recent action has probably not registered its full force throughout the money market.

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FEDERAL RESERVE BANK OF BOSTON

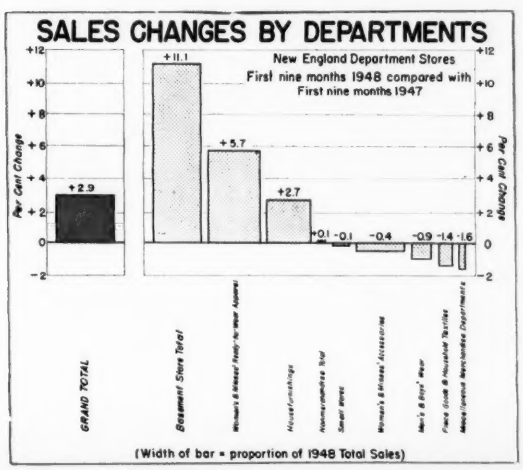
Department Store Sales Volume Spurts During the Third Quarter

CUSTOMERS spent almost three per cent more dollars in New England department stores during the first nine months of 1948 than in the same period last year. Sales in July 9.3 per cent above and in September 5.2 per cent greater than the same months' sales last year offset a slight decline of one per cent in August and boosted the comparative sales for 1948 over 1947 during the first nine months to +2.9 per cent above the first nine months of last year. The first six months had run only +2.3 per cent over the first half of last year.

Sales gains over last year were greater in the three southern New England states than in the three northern states during the third quarter of 1948. Connecticut sales had been .6 of one per cent below last year during the first six months, the only state reporting a decline, but climbed to 2.5 per cent above last year for the first nine months of 1948 on the crest of July and September business.

Rhode Island stores, despite a poor August in 1948, registered a 2.3 per cent gain over last year for the first nine months, an increase of 1.2 percentage points over the 1.1 per cent gain for the first six months. The Massachusetts increase over last year for the first nine months sales was 3 per cent compared with a 2.6 per cent gain for the first half of the year. Maine stores, which had been lagging behind New Hampshire and Vermont percentage gains during the first half of 1948, reported a spurt in business for the third quarter which exceeded that for New Hampshire and Vermont stores.

Promotional values are leading departmental attractions. Basement store sales gains in 1948 over last year still are a principal reason for total store percentage gains. Women's and misses' ready-to-wear apparel items, especially coats and suits, have sold well during the third quarter and the gains over last year seem to have continued through October. Price, design, and quality apparently have combined to attract purchasers from more discriminating shoppers during a cooler fall season.



Housefurnishings, the over-all durable goods classification, have not had so large a sales gain over 1947 during the first nine months of 1948 as they showed in previous periods, but selective price adjustments and the continued strength of deferred demand have helped to maintain dollar sales over last year's totals. Major household appliance sales during September weakened considerably in New England department stores outside Boston.

Other departments have just barely equalled last year's sales or have fallen behind slightly as indicated in an accompanying chart. Men's and boys' wear, principally men's suits, weakened during the third quarter but advance reporting for October indicates a gain over last year's sales for the combined departments as prices were cut to stimulate sales.

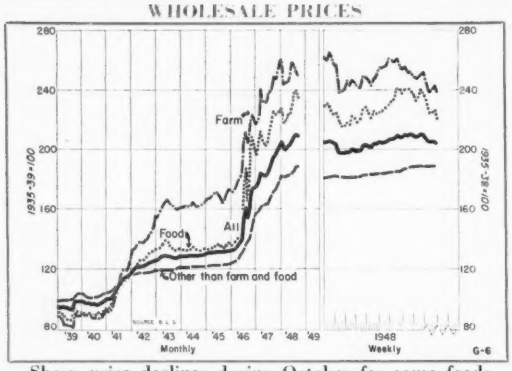
Instalment sales in New England department stores made up a growing proportion of total sales for the first nine months in 1948. The year's sales to the end of September were distributed among types of transactions as follows: instalment sales, 7.8 per cent; regular charge sales, 41.5 per cent; cash sales, 50.7 per cent. For the corresponding period in 1947 the distribution of sales was as follows: instalment sales 6.7 per cent; regular charge sales, 40.1 per cent; cash sales, 53.2 per cent. Although department store customers bought relatively more goods on credit during the first nine months of 1948 than they did in 1947 they bought proportionately less on credit than they did in 1941. Instalment accounts outstanding at the end of the month have been increasing at a faster rate than regular charge accounts in both Boston and other New England department stores during the third quarter of 1948 than they did during the same period last year.

Collection ratios continue to decline. The ratio of collections during the month of September to total accounts outstanding at the first of the month was 36.8 this year compared with 37.5 in 1947 and 42.4 in 1946 for the average Boston department store. The comparable collection ratio for the average department store in the rest of New England during September was 44.7 this year, 47 in 1947, and 48.3 in 1946.

Department stores in New England are still following a cautious inventory policy. The ratio of stocks to sales was 2.36 in September, slightly above the 2.20 ratio for the same month last year but still the second lowest ratio for any September during the past eight years. Deliveries are closer to schedule and price uncertainty has been a restraining force. Maintenance of the level of sales has taken precedence over speculative holdings of inventory in anticipation of a larger sales volume. Inventory utilization efficiency seems to be satisfactory.

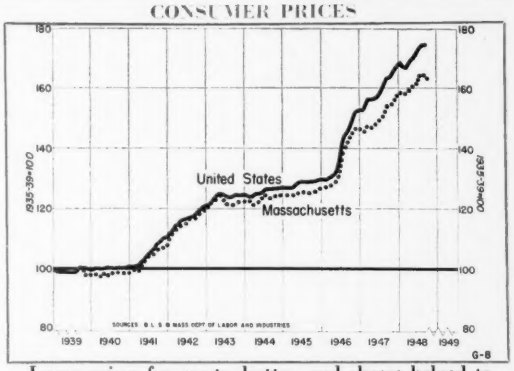
Business Conditions

WHOLESALE PRICES



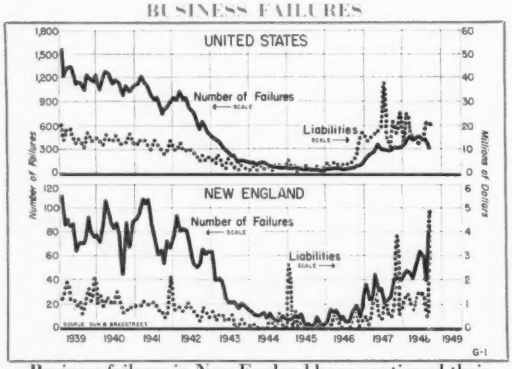
Sharp price declines during October for some foods and farm products, and moderate declines for textile and leather products, reduced the wholesale commodity price index, despite further increases for metal products and building materials.

CONSUMER PRICES



Lower prices for meats, butter, and cheese helped to reduce the consumer's cost outlay slightly in October. Retail prices continued to edge upward, however, for some items of clothing, housefurnishings, fuel, and other consumer needs.

BUSINESS FAILURES

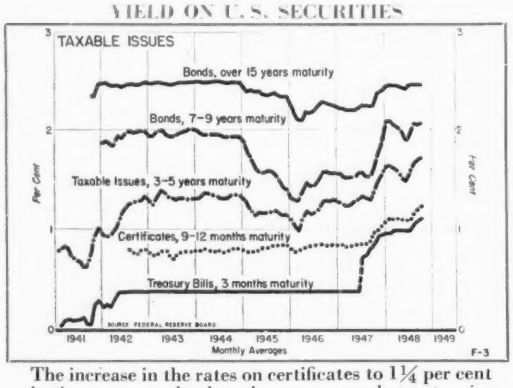


Business failures in New England have continued their generally upward trend in recent months, and in September reached 82, the greatest monthly total since February 1942. Liabilities of firms failing in September were close to $5 million.

N. E. SHARE OF U. S. SHOE PRODUCTION

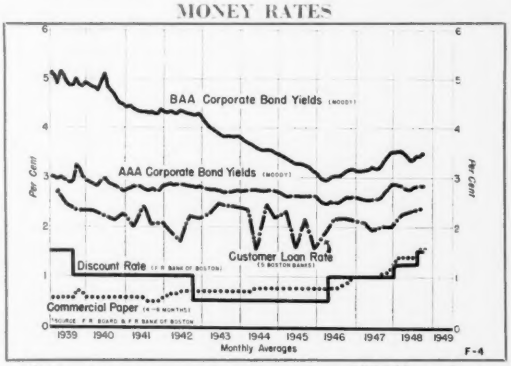
New England's proportion of the nation's shoe production dropped from 35 per cent in 1946 to around 31 per cent in 1947, and has failed to show any improvement in 1948. The decline has been sharpest in Massachusetts factories.

YIELD ON U. S. SECURITIES



The increase in the rates on certificates to 1¼ per cent in August caused other short-term market rates, including those on commercial loans, to move upward. Yields on long-term Government securities have held firm at support levels.

MONEY RATES



Rising interest rates since the spring of 1946 have been accompanied by a widening spread between corporate and Government bond yields — reaching .40 per cent. Increased supplies of corporate bonds have led to more investor selectivity.